

12DY8

Medium-Mu Triode— Remote-Cutoff Tetrode

9-PIN MINIATURE TYPE

For Automobile Radio Receivers Operating
Directly from 6-Cell Storage Batteries

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage range (DC). 10 to 15.9 volts

*For longest life, it is recommended that the heater be
operated within the voltage range of 11 to 14 volts.*

Current (Approx.) at 12.6 volts 0.35 amp

Direct Interelectrode Capacitances (Approx.):^a

Triode Unit:

Grid to plate 1.5 μ f

Grid to cathode & internal shield,
and heater. 2 μ f

Plate to cathode & internal shield,
and heater. 2 μ f

Tetrode Unit:

Grid No.1 to plate. 0.74 μ f

Grid No.1 to cathode, grid No.2,
and heater. 11 μ f

Plate to cathode, grid No.2,
and heater. 3 μ f

Characteristics, Class A₁ Amplifier:

With heater voltage of 12.6 volts

	Triode Unit	Tetrode Unit	
Plate Voltage	12.6	12.6	volts
Grid-No.2 Voltage	—	12.6	volts
Grid-No.1 Voltage	0	—	volts
Grid-No.1 Resistor.	—	2.2	megohms
Amplification Factor.	20	—	
Plate Resistance (Approx.).	10000	5000	ohms
Transconductance.	2000	6000	μ mhos
Plate Current	1.2	14	ma
Grid-No.2 Current	—	2	ma
Grid Voltage (Approx.) for plate μ a = 10	—2	—	volts
Grid-No.1 Voltage (Approx.) for plate μ a = 20	—	—9	volts

Mechanical:

Operating Position. Any

Maximum Overall Length. 2-3/16"

Maximum Seated Length 1-15/16"

Length, Base Seat to Bulb Top (Excluding tip) . 1-9/16" $\pm$ 3/32"



RADIO CORPORATION OF AMERICA
Electron Tube Division

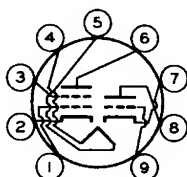
Harrison, N. J.

DATA
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12DY8

Diameter. 0.750" to 0.875"
 Dimensional Outline See *General Section*
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9JD

Pin 1 - Tetrode
 Grid No.1
 Pin 2 - Tetrode
 Cathode
 Pin 3 - Tetrode
 Grid No.2
 Pin 4 - Heater
 Pin 5 - Heater



Pin 6 - Tetrode
 Plate
 Pin 7 - Triode
 Cathode,
 Internal
 Shield
 Pin 8 - Triode
 Plate
 Pin 9 - Triode
 Grid No.1

TETRODE UNIT — RELAY-CONTROL SERVICE

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 16 max. volts
 GRID-No.2 (SCREEN-GRID) VOLTAGE 16 max. volts
 PEAK HEATER-CATHODE VOLTAGE:
 Heater negative with respect to cathode . . 16 max. volts
 Heater positive with respect to cathode . . 16 max. volts

Typical Operation:

Heater Voltage.	10	15	volts
Plate Supply Voltage.	10	15	volts
Grid-No.2 Voltage	10	15	volts
Grid-No.1 Voltage	-	-6	volts
Grid-No.1 Resistor.	10	-	megohms
Plate Load Resistor	700	700	ohms
Plate Current	5 min.	3 max.	ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance. 10 max. megohms

TRIODE UNIT — AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 16 max. volts
 PEAK HEATER-CATHODE VOLTAGE:
 Heater negative with respect to cathode . . 16 max. volts
 Heater positive with respect to cathode . . 16 max. volts

Maximum Circuit Values:

Grid-Circuit Resistance 10 max. megohms

^a without external shield.

